Personal Protective Equipment

OSHA VPP

March 2025

This presentation outlines personal protective equipment (PPE) requirements for the purposes of Occupational Safety and Health Administration (OSHA) Voluntary Protection Programs (VPP) implementation.

The presentation provides information on the background and importance of PPE, reviews suggested documentation, and the various levels of knowledge required. It concludes with an action checklist to help with OSHA VPP implementation and sustainment efforts.

Objectives

- In this presentation, you will learn to:
  - Summarize the background and importance of PPE
  - List PPE-related documentation
  - Describe the knowledge leadership/management, key personnel, and the workforce should have regarding PPE
  - Identify PPE-related actions to implement and sustain OSHA VPP

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This presentation is beneficial to safety and health (S&H) professionals, VPP representatives, as well as others responsible for the selection, issuance, use, inspection, and maintenance of PPE.

Background & Importance

- Included in the HPC criteria for VPP

- Includes garments or equipment designed to protect against workplace injuries and illnesses

- Used as the last defense against hazards

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HPC = Hazard Prevention and Control

PPE protects your employees from exposures to chemical, radiological, physical, electrical, mechanical, or other workplace hazards. Appropriately designed, constructed, fitted, maintained, and used PPE can be the difference between an employee working safely or experiencing a serious injury.

Examples of PPE include: gloves, face shields, goggles, safety shoes, ear plugs, respirators, hard hats, coveralls, and fall protection harnesses.

PPE **should not be** the preferred hazard control on interim control choice to protect employees from hazards – it is the **last resort**! Use PPE when elimination, substitution, engineering, and administrative controls are not feasible or effective to reduce risks to an acceptable level.

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Documentation

- PPE program, if applicable
- Hazard control programs
- PPE hazard assessments
- Hazard analyses
- PPE training records
- Pre-purchase reviews and approvals
- PPE inspection and maintenance records
- Follow-up evaluations

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Make sure you provide completed forms and documents to your assessment team. Don't just show them blank forms! They want to see the documents you filled out to thoroughly assess the processes within your safety and occupational health management system (SOHMS).

OSHA does not require a written PPE program; however, establishing a written plan helps you effectively execute and evaluate your PPE requirements. If you do establish a written program, review it annually, just like any other S&H program.

You can incorporate PPE into your other hazard control programs (e.g., respiratory protection, hearing conservation, and fall protection) too.

PPE hazard assessments ensure you review equipment or processes and identify PPE required and/or recommended to perform a job safely. Incorporate the results of your PPE hazard assessments into your hazard analyses documents (e.g., job hazard analysis [JHA], job safety analysis [JSA]). Pre-purchase reviews and approvals show you evaluated and approved the PPE prior to purchase and use.

Training records verify you trained employees on how to don, doff, maintain, and store their PPE. PPE inspection and maintenance records validate when your employees inspect and conduct maintenance on their PPE to ensure it is working properly.

Follow-up evaluations are important because they show you took the steps to see if selected PPE is effectively protecting your employees from hazards and did not create any new hazards in the process.

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Leadership/Management Knowledge

- Leaders and managers should know about:
  - Personnel in charge of PPE-related processes
  - Location of documented PPE requirements
  - PPE procurement and approval processes
  - Budgetary/resource allocations for PPE
  - Outcome of PPE inspections and follow-up evaluations

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Leaders and managers must know who to contact, where to locate PPE requirements, and basic information regarding PPE procurement and approval processes.

Leaders and managers should understand the outcomes of PPE inspections and follow-up evaluations so they can allocate additional resources for PPE, if necessary.

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Key Personnel Knowledge

- Key personnel should be knowledgeable about:
  - PPE regulations and work area requirements
  - Methods to conduct PPE hazard assessments
  - Process to select and recommend PPE
  - PPE training requirements and completion of training
  - Steps for PPE approval and procurement
  - PPE inspection and maintenance procedures
  - Results of PPE follow-up evaluations

Image retrieved from Microsoft Images

Key personnel may include: S&H professionals, industrial hygienists, hazard control program managers, S&H training managers, supervisors, maintenance personnel, employees responsible for conducting inspections. This list is not all-inclusive; there may be others within your organization that have PPE responsibilities. Those with PPE responsibilities must understand PPE regulations and requirements.

Key personnel should understand the process for completing PPE hazard assessments and what to do with the assessment results. They should also be familiar with specific details such as selecting and recommending PPE, obtaining approvals, and how to purchase it. Key personnel must also understand PPE inspection and maintenance requirements and monitor the completion of inspections.

Key personnel must be familiar with OSHA PPE training requirements and ensure any provided training aligns with these expectations.

Key personnel must also understand the process to conduct follow-up evaluations to determine if implemented PPE is effective. They must also know what to do with the results of these evaluations to continually improve your SOHMS.

The image shows a S&H professional conducting a PPE hazard assessment. Image retrieved from Microsoft Images.

Workforce Knowledge

- Employees should know:
  - When PPE is necessary
  - Types of PPE worn for specific jobs
  - PPE limitations
  - Provided PPE training
  - PPE inspection responsibilities
  - Procedures to don, doff, adjust, and wear PPE
  - Steps to care, maintain, store, and dispose of PPE
  - Steps for requesting PPE/reporting unsafe PPE

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Employees must understand when PPE is required and what PPE they are required to wear to protect themselves against hazards.

PPE limitations are a common gap in employee knowledge. Employees need to understand their PPE does not protect against all hazards and that some PPE may have limited effectiveness. For example, gloves have a breakthrough time – if you wear gloves while handling a chemical, you may have to discard them every 30 minutes, or the chemical will deteriorate the glove and contact your skin. Employees must understand these limitations to properly use PPE and to protect themselves.

Employees must be aware of inspection requirements for their PPE. For example, a fall protection harness needs to be visually inspected by an employee prior to wearing it for a shift. Employees must understand the PPE inspections they are responsible for and what to do with the inspection results.

They must also know how to properly wear the PPE provided to them. If they wear it incorrectly, it won't effectively protect them against hazards. Additionally, knowing the proper care, maintenance, storage, and disposal of PPE is a requirement. PPE can easily become damaged or ineffective over time if it's not cared for. Ensure you have a process for employees to report damaged and ineffective PPE.

The image shows employees wearing PPE. Image retrieved from Microsoft Images.

Action Checklist

❑ Review PPE regulations, processes, and procedures

❑ Consider developing a written PPE program

❑ Complete PPE hazard assessments

❑ Select PPE

❑ Certify PPE hazard assessments

❑ Communicate hazard assessment results

❑ Conduct PPE training

❑ Implement the use of PPE

❑ Evaluate the effectiveness of PPE

❑ Review/update PPE processes and procedures

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Follow this action checklist to implement and sustain VPP expectations for PPE. Each of these action checklist items will be covered in more detail on the following slides.

PPE Regulations Review

- Become familiar with applicable PPE regulations

  – Check Service or Agency regulations and instructions

  – Review OSHA PPE regulations

  – Look at local PPE processes and procedures

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Review your Service and Agency instructions and regulations for any PPE requirements or guidance.

Review the OSHA General Industry Requirements under Part 1910, Subpart I - PPE, 29 CFR 1910.132 – 1910.138 at: https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910subparti

Review any existing local processes or procedures (e.g., PPE selection, approval and procurement, inspections, and follow-up evaluation process).

Image retrieved from Microsoft Images.

Written PPE Program

- Consider developing a written PPE program documenting:
  - Responsibilities
  - PPE hazard assessment requirements
  - PPE training requirements
  - Selection, procurement, and availability of PPE
  - Processes for maintaining, using, and disposing PPE
  - Provisions for conducting periodic evaluations and program reviews

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OSHA does not require a written PPE program; however, if you decide to develop a PPE program, ensure it adheres to the local Service/Agency guidance and regulations and includes any OSHA PPE requirements.

Visit Pennsylvania State University for an example written PPE program at:
https://guru.psu.edu/policies/sy06.html

Image retrieved from Microsoft Images.

PPE Hazard Assessment

- Conduct a hazard assessment
- Involve supervisors and employees
- Review each work activity
- Identify S&H hazards
- Determine if PPE can be used as a hazard control
- Document the results

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OSHA 29 CFR 1910.132(d)(1) requires a PPE hazard assessment: https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.132

PPE hazard assessments are just like any other hazard assessment you conduct. Involve affected employees, supervisors, and key personnel (e.g., safety staff, industrial hygienists) that are familiar with the work activity you're evaluating. Identify all the S&H hazards associated with an activity. Assess the hazards to determine if PPE is a feasible hazard control to protect employees against the identified hazards. Remember to use the hierarchy of controls and determine if other options are available before implementing PPE. If PPE is a reasonable hazard control, then initiate your PPE selection process to identify the types of PPE necessary to protect your employees.

Document the results of the hazard assessment. Capture the work activity evaluated, date of the assessment, person(s) completing the assessment, and person(s) verifying the completion of the assessment.

The image shows a team conducting a PPE hazard assessment. Be sure to document all PPE currently in use for evaluation. Image retrieved from Microsoft Images.

Example – PPE Hazard Assessment

PPE Hazard Assessment Certification Form

*Name of work place: _____   *Assessment conducted by: _____
*Work place address: _____   *Date of assessment: _____
Work area(s): _____   Job/Task(s): _____
*Required for certifying the hazard assessment.   Use a separate sheet for each job/task or work area

EYES

Work activities, such as:	Work-related exposure to:	Can hazard be eliminated without the use of PPE?
☐ abrasive blasting ☐ sanding ☐ chopping ☐ sawing ☐ cutting ☐ grinding ☐ drilling ☐ hammering ☐ welding ☐ punch press operations ☐ other: _____	☐ airborne dust ☐ flying particles ☐ blood splashes ☐ hazardous liquid chemicals ☐ intense light ☐ other: _____	Yes ☐ No ☐ If no, use: ☐ Safety glasses ☐ Side shields ☐ Safety goggles ☐ Dust-tight ☐ Shading/Filter (#_____) goggles ☐ Welding shield ☐ Other: _____

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Work activities, such as:	Work-related exposure to:	Can hazard be eliminated without the use of PPE?
☐ cleaning ☐ foundry work ☐ cooking ☐ welding ☐ siphoning ☐ mixing ☐ painting ☐ pouring molten ☐ dip tank operations metal ☐ other _____	☐ hazardous liquid chemicals ☐ extreme heat/cold ☐ potential irritants: _____ ☐ other: _____	Yes ☐ No ☐ If no, use: ☐ Face shield ☐ Shading/Filter (#_____) ☐ Welding shield ☐ Other: _____

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Work activities, such as:	Work-related exposure to:	Can hazard be eliminated without the use of PPE?
☐ building maintenance ☐ confined space operations ☐ construction ☐ electrical wiring ☐ walking/working under catwalks ☐ walking/working under conveyor belts ☐ walking/working under crane loads ☐ utility work ☐ other: _____	☐ beams ☐ pipes ☐ exposed electrical wiring or components ☐ falling objects ☐ machine parts ☐ other: _____	Yes ☐ No ☐ If no, use: ☐ Protective Helmet ☐ Type A (low voltage) ☐ Type B (high voltage) ☐ Type C ☐ Bump cap (not ANSI-approved) ☐ Hair net or soft cap ☐ Other: _____

Image retrieved from Microsoft Images

View OSHA's non-mandatory Appendix B of 29 CFR Subpart I for example PPE hazard assessments and PPE selection procedures at: https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartIAppB

View Oregon OSHA's guide on PPE hazard assessments at: http://osha.oregon.gov/OSHAPubs/2738.pdf

The image shows a PPE hazard assessment template. Image retrieved from Microsoft Images.

PPE Selection

- Review results of the PPE hazard assessments
- Review PPE regulations and certification standards
- Involve supervisors/employees
- Discuss potential PPE options
- Match PPE to S&H hazards
- Consider physical comfort, fit, and ability to perform work
- Evaluate cost considerations

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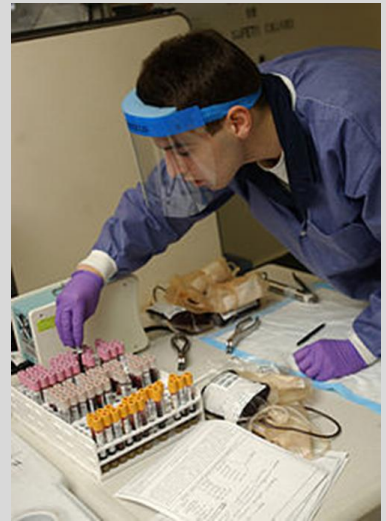
Use your PPE hazard assessment results to select PPE for the work activity you evaluated.

Involve employees as much as possible during the PPE selection process. They can provide input on whether the PPE may cause discomfort or if the PPE will make it more difficult to perform their job. Select PPE in accordance with PPE regulations and certification standards based on the tasks performed.

Consider personnel comfort and fit when selecting PPE. Purchase different sizes to fit all your employees that will be using it. Reach out to PPE vendors; some vendors will send sample items for your employees to test. Always consider the different sizes you may need before making a major purchase. Conduct fit tests to ensure PPE fits the employee properly, if necessary (e.g., respirators).

Verify PPE is compatible with other types of PPE if your employees are required to wear more than one form of protection (e.g., wearing a welding shield and safety glasses). Ensure using both types of PPE together does not create any additional hazards.

The image shows a laboratory employee wearing gloves, a face shield, and protective garments. Image retrieved from Microsoft Images.

Certification & Communication of Results

- Certify the PPE hazard assessment
  - Have a competent person review the completed assessment
  - Make sure this person signs, or "certifies," the assessment
  - Ensure there is a statement indicating that this person certifies the assessment
- Inform affected employees of:
  - Hazard assessment results
  - Selected PPE
  - Location of completed hazard assessments

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NOTE: You are required to have a document **certifying** your completed hazard assessments. A competent person (e.g., safety staff, knowledgeable supervisor) must review completed assessments and certify (sign-off on) the information. Certify your hazard assessments before communicating the results to your employees.

Communicate the results of the assessment to all affected employees – this helps them understand why and what types of PPE are required to safely perform their jobs. Discuss any new S&H hazards, explain why you selected the PPE, and tell them where they can find a copy of the assessment.

Best Practice: Implement a process where affected employees sign the certified PPE hazard assessment stating they review the assessment and/or you communicate the results to them. Alternatively, include the certified hazard assessment as a part of your PPE training program.

Image retrieved from Microsoft Images.

PPE Training

- Train employees on PPE

- Address each specific type of PPE to be worn

- Customize training based on types of PPE required

- Communicate maintenance and inspection expectations

- Document the completion of training

Training Topics Must Include
OSHA 29 CFR 1910.132, General PPE Requirements

- When PPE is necessary

- What PPE is necessary

- How to properly don, doff, adjust, and wear PPE

- PPE limitations

- Proper care, maintenance, useful life, and disposal

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Visit OSHA 29 CFR 1910.132 PPE training requirements at: https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.132

View additional regulatory guidance for specific types of PPE (e.g., eye protection, respirators) within other OSHA regulations.

Train each affected employee on PPE requirements at your organization. Explain why their PPE is required so they can understand the importance of the training.

Communicate expected maintenance and inspection requirements for their PPE too, such as:
- Inspect PPE before and after each use
- Take care of PPE at all times
- Clean PPE after use
- Repair or replace damaged or broken PPE
- Store PPE in a clean, dry area away from the sun and contaminants

Train key personnel who support your PPE program (e.g., supervisors, procurement staff, industrial hygienists).

Document any training you provide. Include the employee name, date of training, instructor name or online course name, and the type of training provided.

PPE Implementation

- Individually fit PPE and institute medical evaluations, as needed

- Conduct spot-checks to make sure employees are:

  – Wearing PPE properly

  – Performing pre-use PPE inspections

  – Cleaning, maintaining, and storing PPE as intended

  – Tagging defective/damaged PPE

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Implement PPE use after you select, purchase, and train employees on the PPE.

Sometimes, fit tests or medical evaluations/surveillances are required (e.g., respirators) to make sure an employee not only wear PPE properly, but that it fits well, and the employee is healthy enough to use it.

You can appoint personnel to walk through your work areas and assess if employees are wearing PPE correctly. This walkthrough may even include brief interviews with employees to determine if they understand what to do if they find damaged or ineffective PPE.

Review documented logs to determine if employees are completing pre-use inspections. You can ask employees about pre-use inspection procedures and look for employees using defective or damaged equipment. If you see/find this, then they aren't looking for damage prior to using their PPE.

The image shows an employee tagging a damaged fall protection harness out of service. Image retrieved from Microsoft Images.

PPE Implementation

- Verify employees perform scheduled maintenance
- Encourage supervisors to:
  - Lead by example
  - Enforce the use of PPE

Image retrieved from Microsoft Images

You can also go one step further in and see if scheduled maintenance is occurring as planned. Ensure they have a plan in place to monitor any PPE you need maintained.

Supervisors play a critical role in PPE implementation. Encourage them to lead by example! Employees are more likely to wear PPE when they see their supervisor following the rules and wearing their PPE appropriately. Have supervisors utilize your disciplinary procedures to address any non-conformances.

The image represents a supervisor discussing PPE requirements and use during a pre-work meeting.
Image retrieved from Microsoft Images.

PPE Evaluations

- Determine if the PPE is working as intended

- See if hazard exposure is eliminated or reduced

- Check for any new hazards

- Document evaluation results

- Consider selecting different hazard controls, if necessary

Image retrieved from Microsoft Images

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Always perform follow-up evaluations to determine your selected PPE's level of effectiveness. These evaluations show if the PPE is functioning as intended, if employees are using it, or if you need to fine-tune it to reach the maximum level of employee protection. Verify your PPE reduced employee exposure!

Use a combination of employee interviews and observations to evaluate your implemented PPE. Ask investigative questions to determine if employees are using the PPE properly, if PPE is working as intended, and how employees feel about PPE. Also consider if you identify any new hazards and if previous hazards are controlled. You may need to conduct follow-up exposure sampling, or analyze injury logs and reported hazards, to help you assess the work activity.

Document any evaluations you complete – this shows you validated the if the PPE is effective, functioning as intended, or needs replaced.

You may find the PPE does not sufficiently protect your employees against harm. In this case, you start the selection process over again or select a different hazard control.

The image shows employees in PPE. Image retrieved from Microsoft Images.

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Review & Updates

- Be aware of regulatory changes
- Reassess work activities, as necessary
- Revise/update PPE program and hazard assessments to reflect PPE changes
- Retrain employees, as needed
- Evaluate potential hazard control upgrades to eliminate PPE use

Image retrieved from Microsoft Images

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S&H regulations change. It is important for you to be aware of any regulatory changes that affect your organization.

Reassess work activities as needed. Identify and evaluate new equipment and processes, review accident records, and reevaluate the suitability of previously selected PPE. You should incorporate this need into your management of change procedures, which initiate a review of work activities when your workplace/process changes.

Look at your written PPE program and certified hazard assessments to determine if your documentation needs revised whenever PPE changes occur in the workplace.

Retrain your employees when you experience: changes in the workplace or required PPE, an update to your PPE program or PPE training material, and when it is evident employees did not understand or retain the PPE training provided to them. Sometimes PPE manufacturers and vendors offer PPE training too – consider reaching out to them to see if they can assist you with your training needs.

Think about alternative hazard control options (e.g., engineering, administrative) to help you address identified S&H hazards and continuously improve your PPE program and overall SOHMS.

Remember! Use PPE as a last resort!

Best Practice: The image shows a site taking pictures of employees demonstrating and labeling proper PPE use. Hang these pictures in work areas as a reminder of PPE requirements. The SMCX has observed this successful practice at several sites! Image retrieved from Microsoft Images.

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Conclusion

- In this presentation, you learned to:
  - Summarize the background and importance of PPE
  - List PPE-related documentation
  - Describe the knowledge leadership/management, key personnel, and the workforce should have regarding PPE
  - Identify PPE-related actions to implement and sustain OSHA VPP

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